



Issuance Date: September 14, 1998
Effective Date: November 1, 1998
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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-8711

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Steelscape, Inc.
Pacific Northwest Flat Products Facility
220 West Kalama Road
Kalama, Washington 98625

Facility Location

220 West Kalama Road
Kalama, Washington

Water Body I.D. No.

WA-CR-1010

Industry Type

Cold-Rolling and Coating of Steel Strip

Receiving Water

Columbia River @ RM 73.5

Discharge Location

Latitude: 46° 02' 30" N

Longitude: 122° 52' 30" W

is authorized to discharge in accordance with the special and general conditions which follow.

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Southwest Region Manager
Water Quality Program
Washington State Department of Ecology

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SUMMARY OF SCHEDULED PERMIT REPORT SUBMITTALS

Permit Section	Submittal	Frequency	First Submittal Date
S3.	Discharge Monitoring Report	Monthly	15th day of month following permit effective date
S3.I.3	Notice of Change in Authorization	as necessary	
S4.C.	Solid Waste Control Plan	1/permit cycle	within 180 days after permit issuance
S5.A.	Acute Toxicity Characterization Data	Quarterly	within 60 days after first characterization test results are final
S5.A.	Acute Toxicity Tests Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event
S5.C.	Acute Toxicity Compliance Monitoring Reports	Quarterly, if required	60 days after each sampling event
S6.A.	Chronic Toxicity Characterization Data	Quarterly	within 60 days after first characterization test results are final
S6.A.	Chronic Toxicity Characterization Summary Report	1/permit cycle	90 days following the last characterization sampling event
S6.C.	Chronic Toxicity Compliance Monitoring Reports	Quarterly, if required	60 days after each sampling event
S7.	Outfall Evaluation	1/permit cycle	180 days before permit expiration
S8.	Treatment System Operating Plan	1/permit cycle	within 180 days of permit issuance
S9.	Spill Plan	1/permit cycle, updates should be submitted as necessary	within 180 days of permit issuance
G17.	Application for permit renewal	1/permit cycle	180 days before permit expiration

SPECIAL CONDITIONS

S1. EFFLUENT LIMITATIONS

A. Process Wastewater Discharges

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated industrial wastewater at the permitted location subject to meeting the following limitations:

EFFLUENT LIMITATIONS: OUTFALL # 001		
Parameter	Average Monthly ^{1,5,6}	Maximum Daily ^{2,4,6}
Flow, MGD	----	0.180
pH, std. units	Between 6.0 and 9.0	
TSS, kg/day	11	23
Oil and Grease, kg/day	4.6	11
Temperature, °C	----	35
Chromium (Total), kg/day	0.024	0.060
Copper, kg/day	0.034	0.072
Cyanide, kg/day	0.013	0.032
Iron, kg/day	0.10	0.20
Lead, kg/day	0.045	0.14
Mercury, kg/day	0.0010	0.0020
Silver, kg/day	0.014	0.029
Zinc, kg/day	0.13	0.34
Naphthalene, kg/day	----	0.0022 ^(3,4)
Tetrachloroethylene, kg/day	----	0.0031 ^(3,4)
WET (acute)	The permittee should note that there also may be additional effluent limits in section S5. Acute Toxicity and S6. Chronic Toxicity.	
WET (chronic)		

Footnotes for the above table:

(1) The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

(2) The maximum daily effluent limitation is defined as the highest allowable daily discharge.

(3) The MDL for naphthalene is 1.6 µg/L using gas chromatography/mass spectrometry and method number 625 from 40 CFR Part 136. The quantitation level (QL) for naphthalene is 10 µg/L.

The MDL for tetrachloroethylene is 4.1 µg/L using gas chromatography/mass spectrometry and method number 624 from 40 CFR Part 136. The quantitation level (QL) for tetrachloroethylene is 10 µg/L.

These QLs will be used for assessment of compliance with these effluent limits. If the Permittee is unable to attain the MDL and QL in its effluent due to matrix effects, the Permittee shall submit a matrix specific MDL and QL to the Department by July 1, 1997. The matrix specific MDL and QL shall be calculated as follows:

MDL = 3.14 x (standard deviation of 7 replicate spiked samples). This corresponds to the calculation of the method detection limit, as defined in 40 CFR Part 136, Appendix B, with the provision that the MDL be calculated for a specific effluent matrix.

The QL = 5 x MDL

Check standards at concentrations equal to the QL shall be analyzed alongside all compliance monitoring samples. Check standards shall be produced independently of calibration standards and maintained as a part of the Permittee's records. All check standard recovery data and duplicate measurements shall be submitted to the Department in the discharge monitoring report. The Department's precision goal is +/- 20%.

(4) If the measured effluent concentration is below the QL, the Permittee shall report NQ for non-quantifiable.

(5) Average values shall be calculated as follows: measurements below the MDL = 0; measurements greater than the MDL = the measurement.

(6) When sample measurements for compliance with mass-based limits fall below the MDL, the average loading shall be calculated using a concentration value of zero. When sample measurements for compliance with mass-based limits fall above the MDL, the average loading shall be calculated using the measured concentration.

B. Mixing Zone Descriptions

The maximum boundaries of the mixing zones for outfall 001 are defined as follows:

The maximum size of the chronic mixing zone (edge or chronic criteria exceedance zone) is approximately 97 meters downstream and 30 meters upstream of the outfall diffuser. The chronic dilution factor 97 meters downstream of the diffuser is 150. The dilution factor at the edge of the acute criteria exceedance zone (9.7 meters downstream of the diffuser) is 46.

S2. TESTING SCHEDULE

Process Wastewater Discharges

The Permittee shall monitor the wastewater according to the following schedule:

Tests	Sample Point	Sampling Frequency	Sample Type
Flow	final effluent	continuous	totalizing flow recorder
pH	final effluent	continuous	pH probe with recorder
TSS	final effluent	1/week	24-hour composite
O&G	final effluent	1/week	grab
Temperature	final effluent	1/week	grab
Arsenic ⁽²⁾ (inorganic)	final effluent	1/week	24-hour composite
Chromium	final effluent	1/week	24-hour composite
Copper	final effluent	1/week	24-hour composite
Cyanide	final effluent	1/week	grab
Iron	final effluent	1/week	24-hour composite
Lead	final effluent	1/week	24-hour composite
Mercury	final effluent	1/month	24-hour composite
Silver	final effluent	1/month	24-hour composite
Zinc	final effluent	1/week	24-hour composite
Naphthalene	final effluent	1/week	grab
Tetrachloroethylene	final effluent	1/week	grab
WET (acute)	combined effluent ⁽¹⁾	quarterly	grab
WET (chronic)	combined effluent ⁽¹⁾	quarterly	grab

Footnotes for the above table:

⁽¹⁾ The sample location for WET acute and chronic testing shall be where the total combined effluent from the permittee and the Port of Kalama POTW are both present, but before discharge to the Columbia River.

⁽²⁾ Monitoring for inorganic arsenic is being required to characterize the effluent and establish data variability. This pollutant could be present in the effluent at levels above the human health water quality standard. The Permittee may use either of the methods shown below. However, if the graphite furnace atomic absorption (GFAA), method 206.2 from 40 CFR Part 136 is used, the results obtained will be conservatively considered as total inorganic arsenic.

A. Method 1

Method 206.2, 40 CFR Part 136, GFAA for total recoverable arsenic. The GFAA method detection level (MDL) for total recoverable arsenic is 1 µg/L. The GFAA Quantitation Level (QL) for total recoverable arsenic is 5 µg/L (5 × MDL).

B. Method 2

Method 3500-As C, Silver Diethyldithiocarbamate method (Standard Methods for the Examination of Water and Wastewater, 18th edition) for total inorganic arsenic. The MDL is 1 µg/L. The QL is 5 µg/L (5 × MDL).

The Department shall evaluate the arsenic data submitted during the five year term of the permit to determine if there is a reasonable potential to exceed the human health protection criterion. The reasonable potential determination will be made in accordance with the procedures in EPA, 1991, and the Department's Permit Writer's Manual. If reasonable potential exists, effluent limitations for inorganic arsenic shall be imposed when the permit is renewed.

S3. MONITORING AND REPORTING

The Permittee shall monitor and report in accordance with the following conditions.

A. Reporting

Monitoring results obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department, to be submitted no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit. The report(s) shall be sent to the Permit Coordinator, Department of Ecology, Southwest Regional Office, P.O. Box 47775, Washington 98504-7775. Monitoring shall be started on the effective date of the permit and the first report is due on the 15th day of the following month. Monitoring results obtained during the month shall be summarized on the Discharge Monitoring Report (DMR) Form (EPA 3320-1) and submitted no later than the 15th day of the following month.

B. Records Retention

The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring

instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Representative Sampling

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

E. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by the Department.

F. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

G. Laboratory Accreditation

All monitoring data, except for flow, temperature, settleable solids, conductivity, pH, and internal process control parameters, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, chapter 173-50 WAC. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by the Department.

H. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit (S2.) using test procedures specified by Condition S3.E. of this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

I. Signatory Requirements

All applications, reports, or information submitted to the Department shall be signed and certified.

1. All permit applications shall be signed by either a principal executive officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.
2. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Department, and
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under paragraph I.2.b is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of I.2.b must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

S4. SOLID WASTE DISPOSAL

A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, chapter 173-201A WAC, or the State Ground Water Quality Standards, chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or waters.

C. Solid Waste Control Plan

The Permittee shall submit a solid waste control plan to the Department no later than 180 days following the issuance date of the permit. This plan shall include all solid wastes with the exception of those solid wastes regulated by chapter 173-303 WAC (Dangerous Waste Regulations). The plan shall include at a minimum a description, source, generation rate, and disposal methods of these solid wastes. This plan shall not be at variance with any approved local solid waste management plan. Any proposed revision or modification of the solid waste handling plan must be submitted to the Department. The Permittee shall comply with the plan and any modifications thereof. The Permittee shall submit an update of the solid waste control plan with the application for permit renewal 180 days prior to the expiration date of the permit.

S5. ACUTE TOXICITY

A. Effluent Characterization

The Permittee shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted quarterly for one year. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50% of the organisms (LC_{50}). The percent survival in 100% effluent shall also be reported.

Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Department within 60 days after each of the test results are final. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of

toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Acute toxicity tests shall be conducted with the following species and protocols:

- 1) Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F)
- 2) Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hour static test, method: EPA/600/4-90/027F). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing one year of effluent characterization, either:

- (1) The median survival of any species in 100% effluent is below 80%, or
- (2) Any one test of any species exhibits less than 65% survival in 100% effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of one year of effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

In the event of failure to pass the test described in subsection C. of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D. are being met to the satisfaction of the Department.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S1.B. of this permit. The ACEC equals 2.2% effluent.

C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A above on a rotating basis and performed using 100% effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule. The percent survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D. if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the LC₅₀ and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C. after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2). The TI/RE plan shall address areas where adequate guidance, procedures, or protocols are not available for implementation of the plan. The Permittee shall submit a revised TI/RE plan, in accordance with Department comments, within 30 days after receipt of the Department's comments. The Department will issue an administrative order to require implementation of the TI/RE in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent Department of Ecology specifications regarding format and content. Reports shall contain bench sheets and reference toxicant results for test methods. The effluent and reference toxicant test results shall also be submitted as electronic files on floppy disks in the Toxicity Standardized Electronic Reporting Format (TSERF) or other compatible format.
2. Testing shall be conducted on grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
3. Permittees that potentially have ammonia and/or chlorine in the effluent shall measure total ammonia and/or chlorine from a sample collected for toxicity testing. All samples taken for toxicity testing shall have pH, total alkalinity, total hardness, dissolved oxygen, and conductivity or salinity measured prior to test initiation.
4. All toxicity tests shall meet quality assurance criteria in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication # WQ-R-95-80, *Whole Effluent Toxicity Testing Regulatory Guidance and Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent. If control performance does not meet protocol standards for acceptability, the test shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water or pristine natural water meeting the requirements of the EPA manual listed in subsection A and of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S6. CHRONIC TOXICITY

A. Effluent Characterization

The Permittee shall conduct chronic toxicity testing on the final effluent. The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Department within 60 days after each of the test results are final. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Effluent testing for chronic toxicity shall be conducted quarterly for one year. The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include the ACEC. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following two species and the most recent version of the following protocols:

Freshwater Chronic Toxicity Test Species		Method
Fathead minnow	<i>Pimephales promelas</i>	EPA/600/4-91/002
Water flea	<i>Ceriodaphnia dubia</i>	EPA/600/4-91/002

B. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections C, D, and F.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).

In the event of failure to pass the test described in subsection C. of this section for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection D. are being met to the satisfaction of the Department.

The CCEC means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S1.B. pursuant to WAC 173-201A-100. The CCEC equals 0.67% effluent.

C. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A above on a rotating basis and performed using the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D. if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C. determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the non-toxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The discharger shall return to the original monitoring frequency in subsection C. after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one

additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2). The TI/RE plan shall address areas where adequate guidance, procedures, or protocols are not available for implementation of the plan. The Permittee shall submit a revised TI/RE plan, in accordance with Department comments, within 30 days after receipt of the Department's comments. The Department will issue an administrative order to require implementation of the TI/RE in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial chronic effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent Department of Ecology specifications regarding format and content. Reports shall contain bench sheets and reference toxicant results for test methods. The effluent and reference toxicant test results shall also be submitted as electronic files on floppy disks in the Toxicity Standardized Electronic Reporting Format (TSERF) or other compatible format.

2. Testing shall be conducted on grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
3. Permittees that potentially have ammonia and/or chlorine in the effluent shall measure total ammonia and/or chlorine from a sample collected for toxicity testing. All samples taken for toxicity testing shall have pH, total alkalinity, total hardness, dissolved oxygen, and conductivity or salinity measured prior to test initiation.
4. All toxicity tests shall meet quality assurance criteria in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication # WQ-R-95-80, *Whole Effluent Toxicity Testing Regulatory Guidance and Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent. If control performance does not meet protocol standards for acceptability, the test shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water or pristine natural water meeting the requirements of the EPA manual listed in subsection A and of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S7. OUTFALL EVALUATION

The Permittee shall inspect the submerged portion of the outfall line and diffuser to document its integrity and continued function. If conditions allow for a photographic verification, it shall be included in the report. The inspection report shall be submitted to the Department.

S8. TREATMENT SYSTEM OPERATING PLAN

Wastewater treatment systems shall be operated according to procedures and criteria described in an approved operating plan. This plan shall be submitted for the Department review and approval within 180 days of the date of the issuance date of this permit. The plan shall include, but is not limited to, the following:

- A baseline operating condition which describes the operating parameters and procedures used to meet the effluent limitations of S1. at the production levels used in developing these limitations.
- In the event of production levels which are below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.
- A description of any regularly scheduled maintenance or repair activities at the permitted facilities which would affect the volume or character of the wastes discharged; a list including quantities and chemical compositions of any maintenance-related substances (such as cleaners, degreasers, solvents, etc.) that will be discharged, and a plan for monitoring and treating/controlling the discharge of maintenance-related materials.

S9. SPILL PLAN

Within 180 days after the issuance date of the permit, the Permittee shall submit to the Department a spill control plan for the prevention, containment, and control of spills or unplanned discharges of: 1) oil and petroleum products, 2) materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or 3) other materials which may become pollutants or cause pollution upon reaching state's waters. The Permittee shall review and update the Spill Plan, as needed, at least annually. Changes to the plan shall be sent to the Department. The plan and any supplements shall be followed throughout the term of the permit.

The updated spill control plan shall include the following:

- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- A list of all oil and chemicals used, processed, or stored at the facility which may be spilled into state waters.

For the purpose of meeting this requirement, plans and manuals required by 40 CFR Part 112, and contingency plans required by chapter 173-303 WAC may be submitted.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control.

G3. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G4. NONCOMPLIANCE NOTIFICATION

If for any reason, the Permittee does not comply with, or will be unable to comply with, any of the discharge limitations or other conditions specified in the permit, the Permittee shall, at a minimum, provide the Department with the following information:

- A. A description of the nature and cause of noncompliance, including the quantity and quality of any unauthorized waste discharges;
- B. The period of noncompliance, including exact dates and times and/or the anticipated time when the Permittee will return to compliance; and
- C. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the noncompliance.

In addition, the Permittee shall take immediate action to stop, contain, and clean up any unauthorized discharges and take all reasonable steps to minimize any adverse impacts to waters of the state and correct the problem. The Permittee shall notify the Department by telephone so that an investigation can be made to evaluate any resulting impacts and the corrective actions taken to determine if additional action should be taken.

In the case of any discharge subject to any applicable toxic pollutant effluent standard under Section 307(a) of the Clean Water Act, or which could constitute a threat to human health, welfare, or the environment, 40 CFR Part 122 requires that the information specified in Sections G4.A., G4.B., and G4.C., above, shall be provided not later than 24 hours from the time the Permittee becomes aware of the circumstances. If this information is provided orally, a written submission covering these points shall be provided within five days of the time the Permittee becomes aware of the circumstances, unless the Department waives or extends this requirement on a case-by-case basis.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

G5. BYPASS PROHIBITED

The intentional bypass of wastes from all or any portion of a treatment works is prohibited unless the following four conditions are met:

- A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;
- B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;
- C. The Permittee submits notice of an unanticipated bypass to the Department in accordance with Condition G4. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the Department, if possible, at least 30 days before the date of bypass (or longer if specified in the special conditions);
- D. The bypass is allowed under conditions determined to be necessary by the Department to minimize any adverse effects. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the Department will approve or deny the request. Approval of a request to bypass will be by administrative order under RCW 90.48.120.

G6. RIGHT OF ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;
- B. To have access to and copy at reasonable times any records that must be kept under the terms of the permit;
- C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;

- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- E. To sample at reasonable times any discharge of pollutants.

G7. PERMIT MODIFICATIONS

The Permittee shall submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will (1) result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants, or (2) violate the terms and conditions of this permit.

G8. PERMIT MODIFIED OR REVOKED

After notice and opportunity for public hearing, this permit may be modified, terminated, or revoked during its term for cause including, but not limited to, the following:

- A. Violation of any terms or conditions of the permit;
- B. Failure of the Permittee to disclose fully all relevant facts or misrepresentations of any relevant facts by the Permittee during the permit issuance process;
- C. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;
- D. Information indicating that the permitted discharge poses a threat to human health or welfare;
- E. A change in ownership or control of the source; or
- F. Other causes listed in 40 CFR 122.62 and 122.64.

Permit modification, revocation and reissuance, or termination may be initiated by the Department or requested by any interested person.

G9. REPORTING A CAUSE FOR MODIFICATION

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G8. or 40 CFR 122.62 must report such plans, or such information, to the Department so that a decision can be made on whether action to modify or revoke and reissue a permit will be required. The Department may then require submission of a new application. Submission of such application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G10. TOXIC POLLUTANTS

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation upon such pollutant in the permit, the Department shall institute proceedings to modify or revoke and reissue the permit to conform to the new toxic effluent standard or prohibition.

G11. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the Department for approval in accordance with chapter 173-240 WAC. Facilities shall be constructed and operated in accordance with the approved plan.

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G14. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G15. REVOCATION FOR NONPAYMENT OF FEES

The Department may revoke this permit if the permit fees established under chapter 173-224 WAC are not paid.

G16. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewater shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G17. DUTY TO REAPPLY

The Permittee must reapply, for permit renewal, at least 180 days prior to the specified expiration date of this permit.